Utilization of Health Care Among Female-to-Male Transgender Individuals in the United States

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ABSTRACT. Female-To-Male (FTM) transgender individuals were approached at a conference and several peer support groups in the United States and asked to complete a short questionnaire regarding their medical care. Results from the 122 completed questionnaires indicated that a high number of respondents were taking testosterone (n = 106) and had some gender-confirming surgery (n = 68). Seventy percent of respondents rated their overall quality of health care "good" or "excellent." A surprising finding was the low number (7%) reporting diagnoses of polycystic ovarian syndrome–the incidence of which has been reported elsewhere as high as 50%. Also notable were the high levels of employment, insurance, knowledge of standards of care, and access to providers, contrasting with reports from studies involving predominantly Male-To-Female (MTF) individuals. Finally, FTM's usage of transition-related medical resources can vary, but many within this study are foregoing genital surgery.

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INTRODUCTION

Transgender is a broad term used to describe a wide range of individuals who have atypical experiences of gender or unconventional gender presentations. The prefix "trans" is used in this paper to describe matters pertaining to the transgender experience. This paper focuses on people who were born in female bodies and who live as male all or part of the time. These individuals may be called Female-To-Male (FTM) or Transmen. Such individuals may chose to express their masculinity in many ways including, but not limited to, transitioning from female to male and living as men.

FTM transgendered individuals face unique challenges in obtaining health care. In addition to services related to gender transition, they need primary care and emergency medical care that is sensitive and respectful of their situations. The lack of documentation concerning FTMs in health care settings has contributed to a dearth of informed providers or specialized services. Even medical professionals experienced with transgender clients may have seen a number of Male-To-Female (MTF) individuals, but no Female-To-Males. FTMs are indeed the least known of a little-known, poorly understood population. Today, an increase in the number of professionals who are interested in transgender care, and an increasingly vocal FTM community, provide an opportunity to improve the quality of information and care available. This research surveyed FTMs across the United States to begin exploring the current status of health care utilization in this population.

FTM Needs Assessments

A number of needs assessments have been done through public health organizations that have focused on transgendered individuals, specifically concerning HIV prevention. This is the first aspect of public health in the United States to acknowledge the existence of transgendered people and fund studies. HIV prevention is important, but not yet critical for FTM health care. Certainly FTMs have acquired HIV and succumbed to it, and some transmen do engage in unprotected sex with non-trans men, but the most serious HIV seroprevalence rates are presently occurring in MTF populations.

Most of the existing needs assessments have only a few FTM participants, often fewer than a dozen. Notable exceptions are the San Francisco Transgender Health Survey, which had 123 FTMs, the Washington Transgender Needs Assessment with 60 transpeople who identified as "born anatomically female," and most recently Minneapolis' All Gender Health program managed to recruit 34 FTMs (19% of their total sample) (Bockting, Robinson, Forberg, & Scheltema, 2005; Clements, 1999; Xavier, 2000). More typical is a study done in Philadelphia that had 40 FTMs and a study done in Chicago that had 33 FTMs, none of whom has had surgery, and a New York City study that had 17 FTM participants (Kenagy & Bostwick, 2001; McGowan, 1999; Singer, Cochran, & Adamec, 1997). We believe that the primary reasons for the low numbers of FTMs in these studies is that the FTM population is less dense and socially connected than other HIV research target populations, and that FTMs frequently do not consider themselves at risk for sexually transmitted diseases (STDs). A comparison of these needs assessments is found in Table 1.

A needs assessment conducted by a social organization serving FTM individuals within Los Angeles found 42% of their sample reported having difficulty accessing care (FTM Alliance of Los Angeles, 2004). In addition, 53% reported being denied services because of their transgender status, and 64% did not disclose health information to their health care provider. Overall, 70% were dissatisfied with their regular provider's knowledge of transgender issues. Another study examining the quality of life among FTMs found that hormone use was associated with better quality of life compared to FTMs not using hormones (Newfield, Hart, Dibble, & Kohler, 2006). The findings among these needs assessments have shown that FTMs report problems accessing services and the need for knowledgeable providers.

FTM Health Needs

FTM medical needs can be divided into three categories: preventive health care, critical care, and transcare. Preventive care includes annual checkups, cholesterol screenings, pap smears, and mammograms, etc., as appropriate. Preventive care, or primary care, often depends upon a relationship with a physician. FTM concerns regarding these services are likely to include finding a medical setting and a provider that will treat them with respect. They may need to be addressed as male even though their body may be female, and their provider must speak to them in a

TABLE 1. Comparison of needs assessment data for FTM populations studied

Study	Total subjects (MTF and FTM)	FTM sample size	FTM age mean	FTM age range	FTM employed	FTM insurance	FTM PCP	FTM hormones	FTM surgery**	FTM future surgery
Philadelphia (Singer et al., 1997)	103	40	36 (NB)	17–68 (NB)	93%	82% (NB)	55%			
Philadelphia (Kenagy, 2005)	81	32	25		55%					
NYC (McGowan, 1999)	96	11				82%		36%	45%	82%
Chicago (Kenagy & Bostwick, 2005)	111	33	27		82%	65% (NB)	72% (NB)	27%		
San Francisco (Clements, 1999)	515	123	36	19–61 (NB)	81%	58%		57%	33%	85%
DC (Xavier, 2000)	248	60		13–61	77%			12%	10%	
Los Angeles (FTM Alliance of Los Angeles, 2004)	53	51		15–65		79%				
US (Newfield et al., 2006)	379	379	32			74%		67%	37%	
Rachlin, Green, and Lombardi	122	122	37	18–60	At least 74%*	82%	82%	87%	65%	25%

Note: This is only an overview; because these assessments were designed very differently, exact data comparison is difficult. Blank cells indicate no corresponding data.
NB = No breakdown offered between MTF- and FTM-provided information in the results presented.
*Participants were not asked if they were employed; however, 74% reported that their employer paid for all or part of their health insurance.
**Hysterectomy/oophorectomy not studied; our sample shows at least 29 (23%) have had this surgery already.
(Rachlin, Green & Lombardi, 2008).

language that validates this identity. They will also need the office staff to address them in their chosen name and pronoun regardless of what name and gender appears on their insurance documents. Even in settings where physicians specialize in working with LGBT communities, FTMs may not feel that their needs are met because those professionals are primarily experienced in working with MTFs or with non-trans lesbians (Feldman & Bockting, 2003; Lombardi, 2001).

Critical care is given in response to acute health problems or injuries. Transpeople often report hesitation to go to the hospital or call an ambulance for fear of being discriminated against or refused treatment. Not knowing if a situation will be safe, and fear of discovery as a transperson may prevent individuals from accessing care. Leslie Feinberg reported being ordered out the emergency room even with a temperature above 104° after a physician expressed discomfort over treating a transgender person (Feinberg, 2001). Another example is presented in the documentary film, *Southern Comfort*, which follows the last year in the life of Robert Eads, an FTM transsexual who died of ovarian cancer when his attempts to find a medical provider failed because the doctors did not want to treat a transgender/transsexual patient (Davis, 2001).

Transcare for FTMs includes hormones and surgery and related services that masculinize the body. Any medical provider who delivers transcare should be familiar with the Standards of Care (SOC) for the Treatment of Gender Identity Disorders (Meyer III, 2001), published by the World Professional Association for Transgender Health (WPATH) (formally known as the Harry Benjamin International Gender Dysphoria Association). These Standards describe the nature of transgender conditions and the current consensus among gender specialists as to how to deliver optimal health care and mental health services. The SOC describe the role of hormones, surgery, and psychotherapy in the process of helping individuals "achieve comfort with the gendered self." The SOC recommend that individuals have a psychological evaluation prior to beginning hormones or undergoing surgery, and that they, under some circumstances, live for a period of time in their chosen gender prior to surgery (Although this has not been an absolute requirement since, 1980) (Meyer III, 2001). These guidelines are flexible to accommodate individual circumstances. It is usual for the medical practitioner prescribing hormones or performing surgery to request a letter from a mental health professional describing and the patient's preparedness for treatment.

For some individuals, transition will mean moving from one social gender position and physical sex to the other. For others, hormones alone

or creation of a male chest will be the only physical alterations they require. An individual receiving hormone therapy needs a medical provider to prescribe the hormones, administer and interpret periodic blood tests, and monitor results. Not all FTMs have genital surgery. One location that performs surgeries for FTMs reported that most of their patients undergo breast reduction (42 out of 52), half underwent metoidioplasties (28 out of 52), and only seven had a neophallus constructed (Jarolim, 2000).

Transpeople may be underserved by their insurance because most health insurance coverage in the United States excludes hormones or surgery or any related services associated with transsexualism or change of sex or gender (JSI Research and Training Institute Inc., 2000; Middleton, 1997). While exceptions are occurring, this will not aid the majority of transpeople within the United States. So, often, even if health insurance coverage is available, a transperson may not be able to use it for specific transhealth issues. When a patient's trans status is known, even unrelated services may be denied coverage, while coverage for conditions such as hormone replacement therapy is available for non-trans people. The purpose of this study is to examine the health care experiences of transmen. Information about the men's experiences accessing health care (trans and non-trans related), their usage of hormones, and their attitudes toward the care they receive.

METHODS

Transmasculine and FTM individuals were approached at the FTM Conference of the Americas in Seattle, Washington, in May 2001. Such conferences attract a wide range of transgender individuals and their friends, families, and allies from around the country. Copies of the survey were handed out by one of the researchers to prospective participants. Copies were also left on a table where people could take them. Other participants were recruited through peers, support groups, and through Internet communications. Participants who received the survey via the Internet printed it out and mailed it back via U.S. Mail. Only persons who were labeled female at birth but who live or identify as men or male some or all of the time were included in the sample. We also restricted our respondents to residents of the United States because of the difference in health care delivery systems between the United States and other countries. A total of 122 individuals were recruited into the study.

Measures

Insurance. Participants were asked if they had health insurance (yes/no) and if they received it through their employer, partner/spouse, or if they paid for it themselves. They were also asked about the sex designation they are enrolled under (male or female), and whether their plan specifically excludes transsexual treatments (covered/not covered/partial coverage).

Relationship with physician. We assessed access to experienced providers by asking respondents to estimate the number of other transgendered individuals their primary care provider had seen. This is a measure of patient's perception rather than any factual information about the practitioner. Participants identified whether they have a primary physician (if not, why not?), and if their primary physician knows about their trans status (yes/no). They were asked about the length of time they have been seeing that particular provider and the treatment setting (yes/no). Additional questions about their providers specialty and if they treated other trans people (yes/no). Participants were also asked if they know of other physicians in their area who do treat trans people (yes/no).

Hormone use. Participants were asked about their current testosterone use (yes/no), their mode of use (injection, patch, gel, etc.), their source of testosterone (prescribed by a licensed medical provider, or someone else), and under what diagnosis was it prescribed. Participants were also asked about the length of time they have been using testosterone (in years).

Utilization of standards of care. Participants were asked whether they or their physician were knowledgeable about the Harry Benjamin Association's Standards of Care and whether a psychological evaluation or letter from a psychotherapist had been required.

Experience with care. Participants were asked about the preventative checks they had done (regular blood work, pelvic exams [a follow-up question asks about why they do not have an annual pelvic exam]) and whether their doctor discussed their results with them.

Ratings of health care and health care options. Participants were asked to rate on a scale of 1 (horrible) to 5 (excellent) the medical care they received and how sensitive their providers were to their needs as a transperson.

Transition choices. Participants were asked about the types of medical interventions (testosterone, top surgery, or genital surgery) they had and which ones they plan to have.

Analyses

The authors utilized SPSS v8 for Windows for data analysis. Only univariate statistics were utilized within this exploratory study (percentages and means). Descriptive statistics were used to identify the health care issues experienced by the Transmen within the data.

RESULTS

Sample Characteristics

Most heavily represented were California (n = 39) and Washington (n = 25). The heavier response from these states was likely due to the conference being held in Seattle, and because there is a large support group in California. The average age of the study participants was 37 years and ages ranged from 18 to 60.

Insurance

In the United States a person's insurance status can greatly influence their use of medical services. In the current sample, the majority of respondents (82%) reported that they had insurance. Employers paid for at least part of the insurance premiums in almost three quarters of the cases (74% of those insured). Another 13% of the insured paid for it themselves. Most of them were enrolled under their insurance policy as male (58%), another 35% were enrolled as female, and the remainder either did not know or believed their gender designation was inconsistently recorded within their health insurance's files. Sixty-eight percent of those who had insurance coverage were aware of exclusions in their policy for some or all medical services related to transgender concerns. In those cases, treatment under the diagnosis of Gender Identity Disorder or Transsexualism was not covered. Some individuals were aware that hormones were covered under their insurance plan but that surgeries were specifically excluded.

Relationship with a Physician

Eighty-two percent (n = 100) of the respondents reported that they had a primary care physician (PCP). The length of time they had been with this doctor ranged from one month to 19 years, with a median length of 18 months. Almost half were seeing the physician for less than one year

(46% less than 12 months). In 90% (n = 97) of the cases the doctor knew of their transgendered status. The primary care physicians represented a range of specialties. The most common specialties were internist (n = 16), family practitioner (n = 12), and endocrinologist (n = 10). Only 12 people (11%) reported that their primary care physician was also a "gender specialist." Thirty-five percent (n = 41) see an endocrinologist (often in addition to their primary care physician.). Patients saw doctors in all of the usual settings: clinic (49%), hospital (15%), and in private practice (35%). The majority of respondents who did not have a primary care physician reported this was because they did not have money or insurance.

It was not unusual for a patient to know other transpeople who see the same practitioner. It was also not unusual for a patient to be aware that he is the only transgender patient. Most respondents with a primary care physician (66%) knew or believed that their doctor had seen other transpeople. Fifty people were willing to guess how many the doctor had seen. Guesses ranged from 1 to 300, with a median number of seven patients seen. Sixty-five percent were aware of other doctors in their area who had experience working with trans people. It is interesting to note that 15 of the 28 respondents who said their primary care physician was not treating other trans patients were aware of another physician in the area who was treating other transpeople. The other 13 reported that neither their physician nor any others in the area were treating trans patients.

Hormone Use

The majority of respondents were currently taking testosterone (T) (89%, n = 106) or had plans to begin taking it in the near future (3%, n = 4). All 106 reported having it prescribed by a licensed physician. One reported that in the past he had also obtained it from a friend. The primary care physician was the prescribing doctor for 72% of those receiving hormones. Time on T ranged from one month to 25 years. Most of them had been taking T for less than five years (83%). Eighty-nine percent of those on T reported using injections and 85% of those self-inject. Physicians may bill for hormone treatments under a number of different diagnoses. In this sample the most popular diagnoses were Transsexualism (25%), Hypogonadism (19%), and Gender Identity Disorder (15%). Approximately 30% of the individuals did not know their diagnosis.

Utilization of the WPATH Standards of Care for the Treatment of Gender Identity Disorders

All but nine individuals in this study (8%) had heard of the SOC prior to this survey. Most learned about them through a peer (35%); the Internet (27%); a psychotherapist (14%); or a combination of these (7%). They also learned from the media, from professional journals, and peer publications. Thirty-nine individuals (36%) reported that they had discussed the SOC with their doctor.

The group was clearly aware of the SOC, but were they following the recommendations of those guidelines? Did the physician ask for a letter from a therapist or a psychological evaluation prior to prescribing treatment? Of the 106 respondents taking hormones, sixty-six percent (n = 69) reported that they had been required to provide a letter from a therapist prior to beginning hormones. Thirty-two percent (n = 34) said they had not been so required. Twenty-seven percent reported that they had been required to undergo a real life experience before receiving hormones. Seventy percent (n = 74) reported that they were not so required and 3% (n = 3) wrote additional comments indicating that they were already living as men to some extent (this may have been true for many of the others who did not volunteer that information).

Care Received

More than three-quarters of the respondents (77%) reported they had regular blood work done. Seventy-two percent (n = 88) reported that they discussed the results with their doctor. Sixty respondents (49%) reported they do not receive annual pelvic exams. Table 2 shows the reasons that these people gave for not having these exams. Nearly half of them reported that they had a hysterectomy; presumably they thought this made pelvic exams unnecessary. Most of the respondents (107, or 88%) reported never having been diagnosed with polycystic ovarian syndrome (PCOS); only 8 respondents (7%) did report this diagnosis.

Ratings of Health Care and Health Care Options

When asked to rate the overall medical care they were receiving 30% (n = 34) gave ratings of poor or fair and 70% rated the care good (39%) or excellent (31%). Participants were also asked to rate “How sensitive is your health care provider to your needs as a trans person?” Of those who answered, 5% (n = 6) responded that it was “horrible” another 19% (n = 21) rated the

TABLE 2. Reasons given for not receiving annual pelvic exams among those who reported not having an annual exam n = 60

	Number	Percent*
I have had a hysterectomy	29	48%
Discomfort with physical exam due to gender issues	24	40%
I find the exam physically painful	10	17%
Lack of money or insurance	8	13%
I don't have a medical provider I am comfortable with	8	13%
I don't think I need it	7	12%
Other reasons	3	5%

*Percent of those 60 respondents who do not receive annual pelvic exams.

provider's sensitivity poor or fair. Another 73% (n = 80) rated it good or excellent. All 12 "gender specialists" were rated as good or excellent.

One might expect that Transgender Clinics would be more sensitive to transpeople's needs. Fifteen respondents (12%) reported they had used such a clinic and 60% (n = 73) said they would definitely use one if they had access. Another 10% (n = 12) said they might use one.

Transition Choices

The participants were asked about the gender transition choices and medical interventions they had undergone or were planning. One hundred nine individuals responded to a series of questions regarding which hormonal or surgical options they have had, those they plan to have in the future, and those they have decided against. They were also asked the order in which they had, or planned to have, these treatments. The responses can be seen in Table 3. Most of the transmen reported using testosterone and having top surgery (breast removal and chest reconstruction), but having no plan for genital surgery (of these, 11 reported having top surgery prior to testosterone). Only seven transmen reported having or planning on having genital surgery.

DISCUSSION

This research builds upon previous needs assessments and highlights issues within the FTM population. Previous needs assessments generally

TABLE 3. Summary of gender-transition treatments n = 122

Testosterone	Top surgery	Genital surgery	Frequency
Yes	Yes	Yes	1
Yes	Yes	Planned	3
Yes	Yes	Not planned	74*
Yes	Planned	Planned	2
Yes	Planned	(Not reported)	19
Yes	Not planned	(Not reported)	3
Planned	Planned	Planned	1
Planned	Planned	(Not reported)	2**
Not planned	Planned	(Not reported)	1
Not planned	Not planned	Not planned	1

*Of these 74 respondents, 11 had top surgery before taking testosterone.
**Of these 2 respondents, 1 is planning to have top surgery before testosterone.

have large samples of MTFs, while FTMs were underrepresented. It is not reasonable to assume that data will generalize from MTFs to FTMs: they are two distinct populations (Green, 2004; Lombardi, 2001; Rachlin, 1999, 2002). Use of "street hormones," risk of HIV, and level of unemployment all were higher for MTFs than for FTMs in the needs assessments that compared the two groups (Clements, 1999). Our sample represented an autonomous and privileged group of FTMs. Participants in our sample were all connected to peer support in some way, either through conferences or the Internet, and had the benefit of information from those sources. Our sample contained a large number of employed individuals who have insurance and have a primary care physician. Almost 16% of nonelderly Americans are uninsured (Fronstin, 2001), this sample shows 18% of FTMs are uninsured, while some other studies show much lower rates of insurance (see Table 1) (Clements, 1999; Kenagy & Bostwick, 2001; McGowan, 1999; Singer et al., 1997). The majority was on hormones and had, or planned to have, top surgery; other samples show much lower rates of both hormones and surgery (Clements, 1999; McGowan, 1999; Xavier, 2000). There is evidence that our sample represents a more socially advantaged group compared to other studies of FTMs. Though transmen require medical care beyond that having to do with gender, gender-related issues may prevent them from seeking care. People often avoid care when they are ashamed of their body, or when they anticipate they will be met with prejudice or ignorance.

The majority of participants reported they received regular pelvic exams. This is encouraging because pelvic exams can often be emotionally and physically painful for transmen. A surprising finding was the small number of respondents who were aware of a diagnosis of polycystic ovarian syndrome (PCOS). The fact that a third of our sample had been on T for approximately a year and a half could also be a contributing factor in our result as studies found a relationship between androgens and PCOS (Bosinski et al., 1997; Futterweit & Deligdisch, 1986; Jansen et al., 2004; Pache et al., 1991; Pache & Fauser, 1993; Pache et al., 1992). Incidence of PCOS diagnosis is much lower in this population than has been previously reported among transmen (Baba et al., 2006; Balen, Schachter, Montgomery, Reid, & Jacobs, 1993). It should be noted that a single self-report measure of whether participants were diagnosed or undergoing treatment for PCOS was used for this study. Individuals may have confused their existing health problems for PCOS or have not accessed treatment that would lead toward a diagnosis. As a result the reliability of our measure for PCOS may be limited. Clinical samples of FTMS have found upwards of 50% to have PCOS (Baba et al., 2006; Balen et al., 1993).

Most of the participants in this research received hormones from their primary care physician who was not a gender specialist. Most of those individuals were satisfied with the care received. However, 25% of the respondents reported that their health care provider was insensitive to their transgender or transsexual condition. Clearly more education needs to be done in medical schools or clinical settings to prepare physicians to work sensitively with transgendered and transsexual patients (Franzini & Casinelli, 1986). With 60% indicating willingness to go to a Transgender Clinic, the desire for clinical care that is sensitive to trans needs is very high.

CONCLUSION

For the most part, the population in this study was a well-connected, employed group of people who had access to services and 82% had a PCP and 73% rated their care good or excellent. They are proactive, educated, and concerned about their health. Transition support services and medical options should be developed in response to the needs of the diverse FTM population, not all of whom are located in urban centers, connected to peer support, or able to attend conferences. Clearly more

research needs to be done regarding PCOS and cystic ovaries, and more provider education needs to be done to remove barriers to health care access (including barriers to insurance coverage) and to ensure that when transmen need care the provider and all office/support staff will be skilled and sensitive. Finally, FTMs' usage of transition-related medical resources can vary, but many within this study are foregoing genital surgery. The SOC allow for multiple trajectories such as having surgery before hormones and vice versa, depending upon individual need. The fact that transmen do not access genital surgery should be reflected in medical, social, and legal policies. The social and legal definition of manhood in the United States (and elsewhere) needs to allow for transmen who do not utilize genital surgery.

REFERENCES

Baba, T., Endo, T., Honnma, H., Kitajima, Y., Hayashi, T., Ikeda, H., et al. (2006). Association between polycystic ovary syndrome and female-to-male transsexuality [Electronic Version]. *Human Reproduction*, del474 Retrieved Feb. 28th, 2007 from http://humrep.oxfordjournals.org/cgi/content/abstract/del474v1

Balen, A. H., Schachter, M. E., Montgomery, D., Reid, R. W., & Jacobs, H. S. (1993). Polycystic ovaries are a common finding in untreated female to male transsexuals. *Clinical Endocrinology, 38*(3), 325–329.

Bockting, W. O., Robinson, B. E., Forberg, J., & Scheltema, K. (2005). Evaluation of a sexual health approach to reducing HIV/STD risk in the transgender community. *AIDS Care, 17*(3), 289–303.

Bosinski, H. A., Peter, M., Bonatz, G., Arndt, R., Heidenreich, M., Sippell, W. G., et al. (1997). A higher rate of hyperandrogenic disorders in female-to-male transsexuals. *Psychoneuroendocrinology, 22*(5), 361–380.

Clements, K. (1999). *The Transgender Community Health Project: Descriptive Results*. San Francisco: San Francisco Dept. of Public Health.

Davis, K. (2001). Southern Comfort. On *Southern Comfort* [Documentary]: HBO The atrical Documentary.

Feinberg, L. (2001). Trans health crisis: for us it's life or death. *American Journal of Public Health, 91*(6), 897–900.

Feldman, J., & Bockting, W. (2003). Transgender health. *Minnesota Medicine, 86*(7), 25–32.

Franzini, L., & Casinelli, D. (1986). Health professionals' factual knowledge and changing attitudes toward transsexuals. *Social Science and Medicine, 22*(5), 535–539.

Fronstin, P. (2001). Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 2001 Current Population Survey [Electronic Version]. *Employee Benefit Research Institute (EBRI), Issue Brief, 240*, 1–31. Retrieved Feb. 28th, 2007 from http://ssrn.com/abstract=296989.

FTM Alliance of Los Angeles. (2004). *Results of the 2003 Health Access Survey: The Female-to-Male Transgender Community Experiences Multiple Barriers to Healthcare in Southern California*. Los Angeles FTM Alliance of Los Angeles.

Futterweit, W., & Deligdisch, L. (1986). Histopathological effects of exogenously administered testosterone in 19 female to male transsexuals. *Journal of Clinical Endocrinology & Metabolism, 62*(1), 16–21.

Green, J. (2004). *Becoming a Visible Man* (1st ed.). Nashville, TN: Vanderbilt University Press.

Jansen, E., Laven, J. S., Dommerholt, H. B., Polman, J., van Rijt, C., van den Hurk, C., et al. (2004). Abnormal gene expression profiles in human ovaries from polycystic ovary syndrome patients. *Molecular Endocrinology, 18*(12), 3050–3063.

Jarolim, L. (2000). Surgical conversion of genitalia in transsexual patients. *British Journal of Urology International, 85*(7), 851–856.

JSI Research and Training Institute Inc. (2000). *Access to Health Care for Transgendered Persons in Greater Boston*. Boston: Gay, Lesbian, Bisexual, and Transgender Health Access Project.

Kenagy, G. P. (2005). The Health and Social Service Needs of Transgender People in Philadelphia. *International Journal of Transgenderism, 8*(2/3), 49–56.

Kenagy, G. P., & Bostwick, W. B. (2001). Health and social service needs of transgendered people in Chicago: College of Social Work, University of Illinois: Chicago.

Kenagy, G. P., & Bostwick, W. B. (2005). Health and social service needs of transgendered people in Chicago. *International Journal of Transgenderism, 8*(2/3), 57–66.

Lombardi, E. (2001). Enhancing transgender health care. *American Journal of Public Health, 91*(6), 869–872.

McGowan, C. (1999). *Transgender Needs Assessment*. New York City: the HIV Prevention Planning Unit of the New York City Department of Health.

Meyer III, W., Bockting, W. O., Cohen-Kettenis, P. T., Coleman, E., DiCeglie D., Devor, H., et al. (2001). The standards of care for gender identity disorders (6th Version). *International Journal of Transgenderism, 5*, http://www.symposion.com/ijt/soc/index.htm.

Middleton, L. (1997). Insurance and the reimbursement of transgender health care. In B. Bullough, V. Bullough & J. Elias (Eds.), *Gender Blending* (pp. 455–465).

Newfield, E., Hart, S., Dibble, S., & Kohler, L. (2006). Female-to-male transgender quality of life. *Quality of Life Research, 15*(9), 1447–1457.

Pache, T. D., Chadha, S., Gooren, L. J., Hop, W. C., Jaarsma, K. W., Dommerholt, H. B., et al. (1991). Ovarian morphology in long-term androgen-treated female to male transsexuals. A human model for the study of polycystic ovarian syndrome? *Histopathology, 19*(5), 445–452.

Pache, T. D., & Fauser, B. C. (1993). Polycystic ovaries in female-to-male transsexuals. *Clinical Endocrinology, 39*(6), 702–703.

Pache, T. D., Hop, W. C., de Jong, F. H., Leerentveld, R. A., van Geldorp, H., van de Kamp, T. M., et al. (1992). 17 beta-Oestradiol, androstenedione and inhibin levels in fluid from individual follicles of normal and polycystic ovaries, and in ovaries from androgen treated female to male transsexuals. *Clinical Endocrinology, 36*(6), 565–571.

Rachlin, K. (1999). Factors which influence individual's decisions when considering FTM genital surgery [Electronic Version]. *The International Journal of Transgenderism, 3*. Retrieved Feb. 28th, 2007 from http://www.symposion.com/ijt/ijt990302.htm.

Rachlin, K. (2002). FTM 101: Dispelling Myths About the Invisible and the Impossible. In D. Kotula (Ed.), *The Phallus Palace: Female to Male Transsexuals* (pp. 3–19). Los Angeles: Alyson Publications.

Singer, T. B., Cochran, M. & Adamec, R. (1997). *Final Report by the Transgender Health Action Coalition (THAC) to the Philadelphia Foundation Legacy Fund (for the) Needs Assessment Survey Project (A.K.A. the Delaware Valley Transgender Survey)*. Philadelphia, PA.: Transgender Health Action Coalition.

Xavier, J. M. (2000). *The Washington, DC Transgender Needs Assessment Survey Final Report for Phase Two: Tabulation of the Survey Questionnaires; Presentation of Findings and Analysis of the Survey Results; and Recommendations*. Washington, DC.

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